# Join Us

# ATOUR DECEMBER MEETING!

Join us at our next meeting Thursday, December 2, 7:00 - 8:30pm on Zoom!

Capital Area Audubon's East Lansing Christmas Bird Count

Presenters: Kristy Taylor, Barb Hosler and CAAS Members

Join CAAS members Kristy Taylor and Barb Hosler to talk about the East Lansing Christmas Bird Count. Learn about the history of the count, notable finds, and how you can participate.

Members are encouraged to join us and share your memories from bird counts past! We want to hear why you participate, some of your favorite birds from over the years, and any other CBC stories you would like to share.

Please visit our Zoom link - https://msu.zoom.us/j/94720211954 or open your Zoom app and enter Meeting ID: 947 2021 1954 Password - CAAS



Social time will take place from 7-7:15 followed by brief announcements and our speakers at 7:20pm.

Dedicated to creating a greater awareness, appreciation, and understanding of the interrelatedness of all Michigan's wild places and wildlife and the need for stewardship.

# A NOTE FROM OUR PRESIDENT

Winter has arrived. From the frost on my window, to the enthusiastic birds at my feeder, everything around me is telling me it's time to slow down and cuddle up.

December offers us a great reason to get outside in the cold and enjoy the birds in our area: the Christmas Bird Count. This count is always a highlight of December, and we encourage anyone who would like to participate, to reach out and join in.

At our monthly meeting next week, we will talk about how to participate in the count, share stories of memorable years and notable sightings and share a bit about the history of the East Lansing Christmas Bird Count.

Although the count is named for the center of the circle, the East Lansing CBC also includes Lansing, Bath, Dewitt, Haslett and Okemos. I have joined a group in Lansing for the last few years that is great for beginners.

My section (Area 9) includes Fenner Nature Center and Hawk Island Park. It also includes the South Lansing Meijer, which in past years leading up to the count, has been a great spot to see Ring-billed Gulls. Usually when parking my car and running in for groceries, I spot 5-10 gulls adorning the light poles. Suspiciously, the weekend of the count they magically find another place to call home, and I never seem to be able to add them to my list! This year I am hoping they will wait for me and I can add them to my Area 9 Count.

If you would like to join the count, please check out the information on page two and reach out to count leader, Barb Holsler. You are also

encouraged to join us at our December Zoom meeting to learn more! Even if you are not able to join us, or you are travelling that weekend, consider adding a count of the birds in your backyard to eBird the weekend of the 18th. Learn more by visiting <a href="Audubon.org/conservation/science/christmas-bird-count">Audubon.org/conservation/science/christmas-bird-count</a>

Our next monthly meeting will take place in February. If that is too long to wait, please consider joining me as I share with the Kellogg Bird Sanctuary for their Coffee and Birds talk January 12th. During this Zoom talk, I will share helpful tips about mindfulness in birding, using time in nature to connect and relax, and ways to incorporate mindfulness into your everyday life. This event is free and registration information is available on page 2.

Happy Holidays! Kristy Taylor CAAS Board President 2021-22



# **CAAS EVENTS**

Monthly Meetings will resume in February

East Lansing Christmas Bird Count Saturday, December 18 – Greater Lansing Area (see map for area locations)

Join CAAS members as we participate in one of the longest running community science programs in the country!

Please email Barb Hosler at birdingbarb@yahoo.com for more information. The compilation meeting will take place virtually on the Zoom platform.

Visit - Zoom.us Meeting ID -999 2864 9127 Passcode - CAASCBC

Our next monthly meeting will be in February, 2022.

# LOCAL EVENTS

### Kellogg Bird Sanctuary Coffee and Birds December 8, 10am, Zoom

Join the Kellogg Bird Sanctuary for a Birds and Coffee Chat with Elliot Nelson discussing a few of the eBirdMI Rare Bird Alerts, including Roseate Spoonbill, Little Blue Heron, Cattle Egret, Ash-throated Flycatcher and Royal Tern!

### Coffee and Birds January 12, 10am, Zoom

Join the Kellogg Bird Sanctuary and CAAS President Kristy Taylor to learn about mindfulness and birding!

These events are free, but registration is required. Register at <a href="https://www.kbs.msu.edu/events/">www.kbs.msu.edu/events/</a>

### Michigan Vernal Pools Partnership Annual Meeting Tuesday, December 7th, 1-5pm

Hear guest speakers, connect with other

vernal pool enthusiasts, and get the latest expert updates in vernal pool research mapping and conservation.

To register, visit michigannature.org

# EAST LANSING CHRISTMAS BIRD COUNT

Join us for the 2021 Christmas Bird Count. Like last year, this year's Christmas bird count will take place with full adherence to social distancing guidelines and with a Zoom compilation meeting following the count.

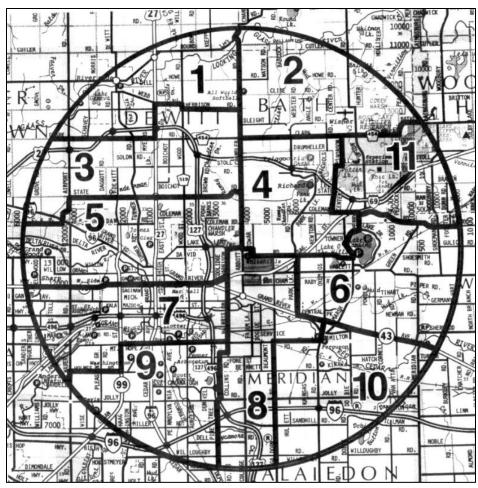
We encourage participants to make counts and report them to their area leaders. New count participants are encouraged to reach out prior to the count to be connected to an area leader. If you are unsure of which area you would like to help with, let us know and we can help find a group that will work well for you! Beginners are welcome and all ages and abilities are encouraged to participate.

Area leaders are encouraged to reach out to Barb Hosler at birdingbarb@yahoo.com for the electronic compilation forms and additional information. Participants should reach out to their area leaders for more information about the count in their area.

The compilation Zoom meeting will take place at 7pm.

Visit - Zoom.us Meeting ID - 978 2564 2635 Passcode - CAASCBC

Hope to see you there!



# TOP INGHAM COUNTY HOTSPOTS

Did you know that eBird lists the top hotspots for each county? The next few months, we will highlight top ten hotspots for nearby counties along with the species totals!

MSU Inland Lakes Research Area (restricted access) (218 species)
 Fenner Nature Center (210), 3. Dansville SGA (199), 4. Lake Lansing (187)
 Lake Lansing Park North (180), 6 Bunker Nature Preserve (173)
 Williamstown Twp. Community Park (170), 8. Scott Woods Park (169)
 Green Acres Turf Farm (165), 10. Legg Park (156).

To view more, visit <u>ebird.org/explore</u> and enter the region you would like to explore.

# CAAS MEMBERSHIP

Support community programs with your CAAS Membership. Your membership supports programs in our community and monthly meetings Sept. through June.

Your membership is more important than ever! It's time to join or renew your membership! Memberships run the length of the program year, September to August.

#### SEPTEMBER 2021 - AUGUST 2022

### **Membership Categories**

 Individual
 \$15.00

 Family
 \$20.00

 Contributing
 \$30.00

 Sustaining
 \$50.00

 Donor
 \$100.00

To sign up and pay online, visit - capitalareaaudubon.org

If you would like to mail your membership form and payment, please mail to -CAAS, PO Box 22065, Lansing, MI 48910

0, 1 to, 1 0 box 22000, Editioning, 1111 10

# **CALL NOTE**

Published monthly
September through June by the
Capital Area Audubon Society
PO Box 22065, Lansing MI 48909.
Deadline for submissions: 20th of the month.

### 2021-2022 CAAS Officers

President Vice President Secretary Treasurer Membership

Website

Kristy Taylor Julia Spalding Mike Moquin Michael Caterino Richard Yarsevich

Editor & Facebook Publicity & Hospitality Field Trip Coordinator Program Coordinator **Historian**  Kristy Taylor Sandra Conn Mike Moquin Julia Spalding

**Open** Roger Wolf

### 2021-2022 CAAS Board of Directors

John Baumgartner Michael Caterino Sandra Conn Patricia Deventer Mike Moquin Julia Spalding Kristy Taylor Richard Yarsevich

caaudubon@gmail.com capitalareaaudubon.org facebook.com/capitalareaaudubon

### HOPEFUL RE-TERN: BLACK TERN MONITORING 2021

### By Ava Landgraf and Jenni Fuller

Between 2013 and 2020, Great Lakes water levels rose higher than have been seen in decades. Where lakeside communities braced against flooding and watched their docks slip underwater, the Black Terns and other marsh bird species at Lake St. Clair suffered as well. Areas once full of the floating vegetation mats used for nesting were largely submerged or washed away. Our most recent season (2021) offered some relief for both people and Black Terns, as the average summer (May-July) lake levels in Lake St. Clair dropped 1.3 feet. Shallower waters supported a possible rebound for the terns and a season ending on a hopeful note.

During the first six years (2013-2018) of monitoring Black Terns at St. Clair Flats (SCF) the lake level rose gradually, but we were still able to search the marsh walking in waders. Meanwhile, the Black Tern population at SCF began to plummet, and many nesting attempts were unsuccessful. By 2019, the deep water began to flood our waders, so we turned to kayaks. Compared to walking, kayaks were faster and prevented dangerous wading situations, but carrying kayaks took up the mud boat's limited space and prevented us from taking out more volunteers. With higher water levels, Black Terns struggled all the more to locate stable vegetation mats for nesting and often built their nests on floating debris, anything from logs, broken-up dock planks, or bright pink slabs of Styrofoam. In 2020, lake levels were the highest they had been since we started monitoring in 2013. Within the first days of the season, we had to locate a new boat launch as we found our regular site entirely flooded. We motored through vast open water

where the Black Tern's usual swaths of marsh habitat once stood. Narrow tips of bulrush barely broke the surface and served as the only indication that this once had been an ideal Black Tern nesting habitat. The Black Tern population dwindled to only 115 individuals (only 23 percent of the original 2013 cohort), and those individuals struggled to raise successful broods. Compared to 2013, the known hatch rate had dropped 56 percent.

The change in scenery from 2020 to 2021 was unbelievable. Almost overnight massive floating "islands" of bulrush mat topped the shallower lake's surface. We could hardly contain our delight as we observed far more Black and Forster's Terns soaring over the tops of cattails and bulrushes or offering minnows to prospective mates on mounds of thick vegetation. The lower water level allowed us to wade through the marsh again. Knowing the benefits, we found a way to still bring our kayaks by strapping them to the sides of the mud boat. With them, we could quickly locate and vacate from nests and chicks to minimize disturbance.

The return of the marsh vegetation in 2021 supported about 45 more terns, more nests, and best of all, more surviving chicks. One of our priorities for 2021 was to track the Black Tern young both at SCF and across the country once they took flight. To do so we utilized nanotags, a rapidly advancing technology in wildlife tracking. These tiny radio transmitters are designed as incredibly lightweight harnesses, emitting unique ID numbers to receivers from long, thin antennae. The nanotags are attached to juvenile Black Terns that are within 10 days



Three Black Tern chicks in a nest on floating vegetation mat by Jenni Fuller. Black Tern chick being weighed prior to banding by Jamie Jacob

# HOPEFUL RE-TERN: BLACK TERN MONITORING 2021 continued...

of flying (50-60 grams), and are hardly noticeable to the bird at all. After a couple of months, the harness wears away and falls off. Before the fledglings leave the colony, researchers look for their ID number using handheld receivers. Once they leave, however, it's up to Motus Wildlife Tracking towers installed throughout North and South America. These towers are capable of recording any nanotag that comes within a nine-mile radius, whether it is a Black Tern or an animal from an entirely different study. Data from the towers is available only after the end of the season.

In 2021, we deployed 20 nanotags, detected 6 with our handheld receiver, and spotted four fledglings flying with their harnesses attached. The most memorable of the juveniles was the first we ever tagged this summer. Hatched in a small subcolony called "Little Muscamoot," it was one of only two surviving young after the other nests were eaten by Northern Water Snakes or destroyed by a particularly large storm we had captured on nest cameras. Whereas the other juveniles were rarely detected more than once, we tracked this bird three separate times, traveling miles apart with its parents to visit two other sub-colonies and the lakeside Brown's Bar. The nanotags have been an amazing way to track the juvenile birds after they fledge and to help us determine which nesting pairs successfully fledged young (raised them to the point they leave the nest and are flying).

Another exciting addition to our monitoring efforts in 2021 were nest cameras, loaned to Detroit Audubon by the Detroit Zoological Society. We were able to record 10 nests continuously using a one-minute time lapse setting. Unfortunately, some mats with nests floated completely out of view of the camera, confirming that the SCF mats can be highly mobile and can move surprising distances. Luckily, other cameras recorded chicks hatching and events that helped us understand both natural and unnatural causes of nest failure.

Eggs were eaten at two nests by native Northern Water Snakes, and another was recorded being completely washed away by a major storm surge. At another nest, mobile chicks had run off the nest in the morning. This is a common

occurrence, especially among older young, but they still often return. However, in the late afternoon, this particular nesting mat was run over by a boat. Probably not coincidentally, this happened on July 5, likely a continuation of Fourth of July celebrations when many people are out on the water. This footage suggests that boater activity could contribute to nest failures, either by running over mats as happened in this case, or by creating a large enough wake to submerge eggs or chicks. Young chicks are especially vulnerable to the elements due to their soft down, which is not water repellent; thus wet chicks can get too cold and die. Both nests and chicks are incredibly well camouflaged, so increasing boater awareness may be an important step towards protecting breeding Black Terns in the future.

In 2021, we also continued deploying artificial nest platforms as a way to provide Black Terns with additional nest support. Despite the fact that many Black Terns chose to nest on debris in 2020, they surprisingly ignored nest platforms in the sparse remaining habitat. Still uncertain of their reception in 2021, we set out 12 nesting platforms to see if any terns would choose to use them. The platforms were left empty until mid-July. After several storms washed away or compromised the stability of large bulrush mats, three platforms were used by either late or re-nesting pairs, indicating that platforms were only of interest when mat availability diminished. Two of these nests failed. and we were unable to ascertain the outcome of the last nest. To date, we still have little data to support that man made nesting platforms are a successful management strategy at SCF, but this merits continued research and potentially more sitespecific designs.

Overall in 2021, we estimated that about 150 individuals (or 75 nesting pairs) returned to SCF, bringing the population closer to the counts in 2019. While not a staggering comeback, the nesting productivity certainly was. Since 2018, hatching success was lower than 50 percent, but in 2021 it rose to 81 percent. Eggs in 57 of the 70 nests we tracked to their final outcome hatched, and we estimated that at least 9 nests contributed about 26 fledglings in the region. Our fledgling estimate could be high because our tracking revealed their uncanny ability to travel around

frequently and to quite distant locales.

Although 2021 supported more successful nesting terns, the population at SCF is still considerably lower than in 2013 (about 75 versus 300 pairs). Furthermore, the overall Michigan Black Tern population is still on a downward trend. Recent improvements in population and nest success give us hope that the Black Tern population will continue to rebound after the marked habitat loss in previous years. However, as lake level extremes, human development, and invasive species such as Phragmites australis continue to reduce habitat throughout the Great Lakes, Detroit Audubon is committed to continuing ongoing Black Tern monitoring, research, and wellinformed restoration and wetland protection efforts. There is still more work to do in order to understand Black Tern population dynamics and reasons for nest failure before we can develop a plan to protect Black Terns at SCF and throughout the Great Lakes. Developing that plan and implementing it is still our ultimate goal.

Ava Landgraf is Detroit Audubon's Research Coordinator, and **Jenni Fuller** was contracted by Audubon Great Lakes and is a recent graduate of the University of Michigan's School of Environment and Sustainability who completed her master's degree on Black Terns at St. Clair Flats. Her webinar on her research last year is available on Audubon Great Lakes YouTube channel. Audubon Great Lakes is a primary partner that initiated the project with the authors in 2013 and has provided significant funding, as well as staff assistance and expertise, for the research in recent years.



Juvenile Black Tern with nanotag and color band by Jennifer Fuller.